focus

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ALICE TAYLOR, EDITOR

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Alaska

Alaska stands at the crossroads of an air-minded world in which transpolar flights and radar detector screens have pushed Maginot Line concepts of defense into oblivion. But Alaska also stands at the crossroads of its own economic and political evolution. The burning issue of statehood—now or later—depends as much on the barometer of economic activity as on party politics in Washington. Propped by huge military expenditures in the Territory, the barometer is rising. Topping all previous records, the 1953 construction season began with the Defense Department's awarding contracts to the amount of 240 million dollars—about twice the annual return from Alaska's fisheries, mines, forests, and wildlife resources combined.

With this in mind, it is not difficult to understand the concern of all responsible Alaskans. They wonder how the pump-primed economy of this, the largest underdeveloped territory under the American flag, will be able to maintain a high level of activity when defense spending declines.

Fluctuations marked the uneven course of Alaskan affairs for many a decade after Seward's much-discussed $7,200,000 real estate transaction with the Russians in 1867. Neither the gold rushes at the turn of the century nor the subsequent extractive (trapping, sealing, and fishing) activities contributed to solid economic growth in Alaska. Not until the mid-1930's, which saw the establishment of a federally sponsored agricultural group settlement in the Matanuska Valley, was there a definite upturn. But it took World War II to start a boom that, 13 years and 1½ billion defense dollars later, is still going strong.

The war also brought people to this sparsely settled land. In 1880, Alaska, one-fifth the size of the continental United States, had a population of 33,000—native Eskimos, Aleuts, Indians, and a few hundred whites. Seventy years later, its native population had not grown much, but there were in the Territory almost 100,000 nonindigenous people, more than half of whom had been added in the record-breaking decade of the 1940's. During that decade the population of the United States as a whole increased by 14 per cent, that of Alaska by 77 per cent, to a total of 128,643 in 1950. And the most recent estimates place the Territory's 1952–1953 winter—hence resident—population at 160,000, or almost that of Nevada.

More than anything else Alaska needs people. But it cannot hope to attract permanent inhabitants without offering steadier employment and opportunities comparable with those now available "Outside." In 1951, for example, fewer than one-half of those employed in Alaska at the peak of the summer season had jobs there during the following winter. The con-

struction, canning, and mining industries are almost entirely seasonal, attracting from the Western States thousands of migrant workers whose interest in Alaska is limited to wages (which are high) and housing conditions (which are substandard).

As a prerequisite for peacetime economic development, it is necessary that Alaska—deficient in capital and labor, and remote from markets—take stock of its valuable and diversified natural resources.

The catching and processing of fish has been Alaska's leading industry ever since the establishment of the first cannery in 1878. Here is a renewable resource that provides an annual revenue of one hundred million dollars, supports a seasonal labor force of 20,000, and furnishes perhaps two-thirds of the world's salmon as well as smaller catches of halibut, herring, and shellfish.

However, all is not well with Alaska's fisheries. In the last few years the pack has declined to almost half the prewar average. This may be due in part to natural causes, such as the much-talked-of temperature increase of northern oceanic waters. But it is more likely to be the result of overfishing during World War II, when controls were relaxed to fill immediate needs. It is also a matter of record that the comprehensive controls enforced by the United States Fish and Wildlife Service to increase future salmon runs are steadfastly opposed by Pacific Coast canners, for whom long-range conservation measures are not always compatible with short-term profits.

On the other hand, great promise is held out for new and hitherto unexploited marine resources in the deeper waters off Alaska. Several recent research expeditions have reported on the migration of tuna fish or albacore into the Gulf of Alaska, and have confirmed the presence of large concentrations of crabs and flatfish in the Bering Sea. While it would be entirely feasible for a modern fishing fleet to deliver fresh fish to distant markets by freezing them aboard, Alaska is likely to derive greater benefit from a year-round processing industry reducing fish waste and species not now merchantable to oils, vitamins, animal feed, and fertilizer. In both cases the availability of investment capital is the limiting factor.

Of all the natural resources awaiting development, Alaska's forests undoubtedly offer the greatest immediate opportunities. This is especially true of the extensive coastal stands in the Tongass and Chugach National Forests of southeastern and south-central Alaska. Here, according to the United States Forest Service, it would be possible to cut one billion board feet of hemlock, Sitka spruce, and western red cedar every year on a sustained-yield basis. The current rate of cutting is but a small fraction of this potential.

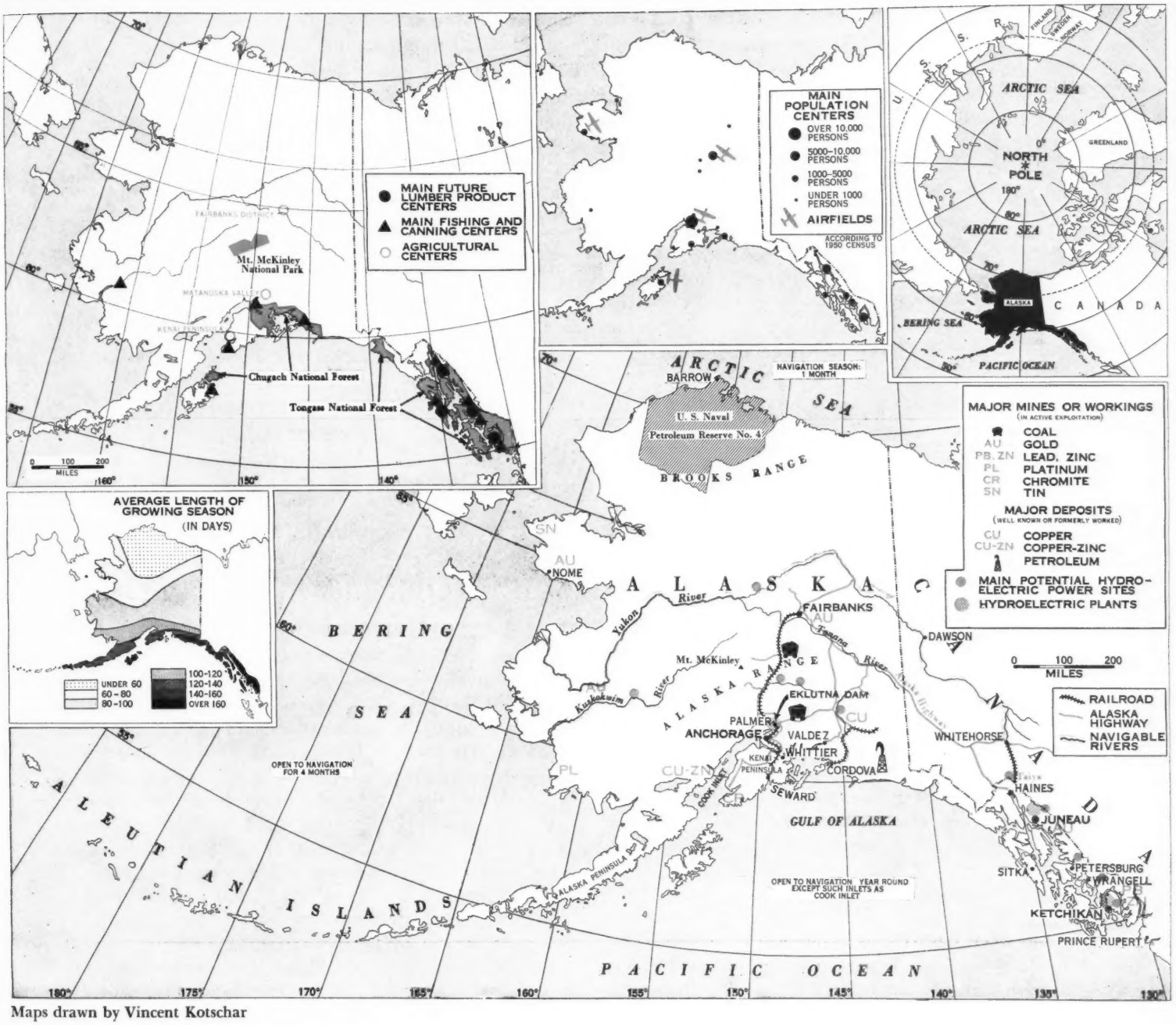
Several physical factors favor a lumbering industry in this area. Owing to the numerous indentations of the fiord-and-island coast line and the low elevation of the timber line, at least three-quarters of the commercial timber lies within 2½ miles of ice-free tidewater. And thanks to the Panhandle's marine type of climate, with rainfall up to 150 inches and moderate winter temperatures, the growth rate compares favorably with that in the coastal areas of the Pacific Northwest.

But, as the present status of the industry—three moderate-sized sawmills and several semiportable ones—would indicate, there is a powerful deterrent to growth. Ocean freight rates along the Inside Passage are so high that Alaskan lumber (except for Sitka spruce, which is needed by the aircraft industry) cannot hope to invade the continental market. On the other hand, because Territorial consumption centers in the Anchorage-to-Fairbanks rail belt, and because wages in the Puget Sound area are lower, Douglas fir from the Pacific Northwest competes successfully with Alaskan timber in the markets of interior Alaska.

One of the most promising developments of the Alaskan scene is the near completion of a privately built pulp mill near Ketchikan, scheduled to go into year-round production in mid-1954. A 50-year concession negotiated with the Forest Service allows for a daily output of some 500 tons of pulp, specifies cutting practices that will maintain production indefinitely on the basis of an 80-year rotation, and provides for the safeguarding of salmon spawning streams, the prevention of pollution, and the preservation of the region's scenic attractions.

It is expected that this contract will set the pattern for pulp mills to be constructed in the Sitka, Juneau, Petersburg, and Wrangell areas, and also for a large newsprint plant, which would serve to reduce our heavy imports from Canada. Whether these projects will be actually carried out depends on how well Alaska's young forest-products industry is able to compete with producers in the west and south of the United States. As transport costs are a key factor, it is significant that the output of the new Ketchikan plant is to be delivered to the east coast over an all-water route via the Panama Canal!

The water-power potential of Alaska is far in ex-



Maps drawn by Vincent Kotschar

cess of foreseeable needs. At the present time there are only three small hydroelectric installations in Alaska, at Juneau, Ketchikan, and Anchorage. The new government-financed Eklutna Project, slated for completion in 1954, with an installed capacity of 30,000 kilowatts, will supply Anchorage and the Matanuska Valley with badly needed low-cost power.

In 1949 the United States Bureau of Reclamation completed a reconnaissance survey of 200 potential water-power sites in Alaska and found that, if developed, they would have a capacity of more than 8 billion kilowatts—almost half the capacity of all the hydroelectric installations in the United States. Of course, it will be a long time before many of these sites can be reached overland or harnessed economically, but those in southeastern Alaska have the advantage of nearness to the tidewater locations of future industries.

Considerations such as these led the Aluminum Company of America to announce in 1952 that it intended to build a mammoth aluminum reduction plant at the head of Taiya Inlet. The project envisaged damming the headwaters of the Yukon River just across the Canadian border, reversing the river's flow, and piercing the coastal range with a 15-mile tunnel to achieve a head of 2,000 feet above the proposed plant. The plant itself would have had an ultimate aluminum capacity of 400,000 tons, or about two-fifths of the current domestic aluminum output.

Alcoa's plan, however, was nipped soon after it became public. The Canadian government, falling back on a Parliamentary Act of 1907, refused to permit the exportation of any power that might be needed for future Canadian development. Behind that refusal was an alternative proposal for the utilization of the Yukon's water resources within Canada for a major metallurgical development. While American enterprise in Alaska appears to have been checked at least temporarily by this move, the ever-widening search for favorable power sites foreshadows the eventual development of a sizable electrometallurgical industry in the Territory.

Whatever we say about Alaska's mineral deposits is little more than speculation. True, ores and metals valued at one billion dollars have been shipped from the Territory in the course of the past 70 years. And there are several government publications which state that, of the thirty-odd metals and minerals classified in the United States as strategic or critical, all except bauxite and industrial diamonds are known to occur in Alaska, some in significant quantities. Let us note, however, that less than 0.3 per cent of the Territory has been mapped at scales suitable for a detailed analysis of geological features, and only about 45 per cent has been covered by geological reconnaissance mapping. Because of the high cost of transport and labor, only high-value, low-volume minerals, such as gold, silver, platinum, and high-grade copper, have reached outside markets in the past, which helps explain why so many of Alaska's important mineral discoveries did not turn overnight into valuable mineral resources.

Under existing conditions, only coal is scheduled for substantially greater production. Two mines, served by spurs of the Alaska Railroad, currently yield some 500,000 tons annually for consumption within the Territory. Though most of the known reserves are of subbituminous and lower grades, there will be no shortage of coal in Alaska. On the contrary, there is more likely to be a surplus, and favorably situated Oriental export markets undoubtedly will be actively sought in the near future.

The outlook for oil recovery, on the other hand, is not too promising. After years of exploratory drilling all operations in the Navy's Arctic petroleum reserve were suspended in the spring of 1953. And private industry has shown little interest in tapping the petroliferous areas known or suspected in the Territory, though drilling southeast of Cordova (where some oil was produced many years ago) has again been started by a private company under contract with the Department of the Interior.

In short, barring major technological changes, Alaska can expect to reap only moderate benefits from its all but marginal mining enterprises for some time to come.

There is no dearth of opinions concerning the role that agriculture ought to play in the development of Alaska. Many have argued that a higher farm output would lower the cost of living, create new opportunities, and attract both settlers and industry. So far, the Territory has depended for almost 90 per cent of its food upon shipments from Outside.

It is surely true that a greater measure of agricultural self-sufficiency would increase the defense capabilities of this outpost. But there are those who contend that, were it not for the hidden subsidy provided by high freight rates, Alaskan farmers would be unable to compete with imported produce even on their local markets.

Whatever their views, observers will agree that Alaska's agricultural problems are difficult and, when

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compared with those of earlier frontier areas, unique. According to the census of 1950, some 12,000 acres of farmland—less than the area of Manhattan Island—have been cleared for cultivation, but only 6,500 acres were harvested in that year. Of the three farming districts, the Matanuska settlement, with its dairy herds, potato fields, truck gardens, and efficient marketing cooperative, remains by far the largest and most prosperous. The small area along the Tanana River supplies Fairbanks with dairy products and vegetables, but cannot compete in the markets of south-central and southeastern Alaska. And the hitherto isolated homesteads on the Kenai Peninsula are now looking forward to sending their surplus to Anchorage over a newly completed highway.

It has been said that agricultural research will soon help to overcome the physical disadvantages which have retarded the growth of farming in Alaska—the short growing season; the dry weather during the period of early growth, followed by cloudy and rainy days at harvest time; soils that are either too wet, too dry, too shallow, or too rocky; and, everywhere north of the Alaska Range, permafrost (permanently frozen ground) within inches of the surface layer. Some amazing progress has been made in breeding cereals, in developing solar radiators and reflectors that create a warmer microclimate for truck gardens, and in lengthening the growing period by spreading coal dust so that the dark-colored surfaces will absorb heat in the spring.

At the same time we cannot overlook the economic factors that, even more than the physical ones, have hampered farming. Because labor and equipment are high, it costs from 100 to 200 dollars to clear an acre of land. The crops grown on that high-value acre must then bear the cost of transport to the city, where storage space is lacking and marketing practices are obsolete and often inefficient. Besides, high industrial wages have lured many a farmer from his land, while prospective farmers are deterred by the size of the capital investment needed to clear and develop a new holding. This explains why, in their recent study, Drs. Leopold and Darling deplore the national preoccupation with homesteading in Alaska, and suggest that a well-planned group settlement, with financial backing and a complement of experienced farmers, is most likely to succeed under such difficult conditions of climate and isolation.

In this travel-conscious age scenic attractions have come to be valued as a true natural asset in many parts of the world. Alaska has much to offer to the tourist who seeks dramatic landscapes and to the naturalist or adventurer who yearns for unspoiled regions. Its wildlife, which still provides food, clothing, and income for thousands of people, will attract sportsmen as well as those who merely wish to view in their natural habitat the migratory waterfowl, the bear, the moose, the caribou, and other big game, and the fur animals of land (such as the mink, fox, and beaver) and sea (the fur seal industry has made a remarkable recovery under United States management).

An increasing number of travelers have been reaching the Territory over the Alaska Highway and the network of good roads that serve south-central Alaska and parts of the interior. Better roadside facilities are urgently needed to cope with this influx of tourists.

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Contributing editor to Focus: G. H. T. Kimble.

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